

Leptochloa filiformis (Lam.) Beauv. var. **attenuata** (Nutt.) Steyerl. & Kucera, comb. nov. based on *Oxydenia attenuata* Nutt. Gen. Pl. 1: 76. 1818; *Leptochloa attenuata* (Nutt.) Steud., Syn. Pl. Glum. 1: 209. 1854.

In their extremes, *Leptochloa filiformis* and *L. attenuata* appear to be distinct. However, many intergradations are found among specimens in Missouri with both types sometimes appearing together. In general, *L. filiformis* var. *filiformis* is taller, attaining 1.2 m. in height, and the inflorescence is often larger with 20-100 stiff spikes, while *L. filiformis* var. *attenuata* is usually of shorter stature, and the inflorescence is usually smaller with only 10-30 flexuous spikes. Unfortunately, tall-growing plants, characteristic of *L. filiformis* var. *filiformis*, are found with the aristate glumes and smaller lemmas characteristic of *L. filiformis* var. *attenuata*, while low-growing plants, characteristic of *L. filiformis* var. *attenuata*, occur with the acute glumes and larger lemmas characteristic of *L. filiformis* var. *filiformis*. The same lack of correlation is noted occasionally between the greater or lesser length of the glumes with respect to the upper floret and the height of the plant. Deam (Grasses of Indiana, p. 198. 1929) also had difficulty in determining whether a specimen placed by him in *Leptochloa attenuata* should warrant specific or varietal status. — INSTITUTO BOTANICO DEL MINISTERIO DE AGRICULTURA Y CRIA, CARACAS, VENEZUELA, AND UNIVERSITY OF MISSOURI, COLUMBIA, MISSOURI.

RHODODENDRON MAXIMUM IN HOPKINTON AND HARRISVILLE, NEW HAMPSHIRE

A. R. HODGDON AND RADCLIFFE PIKE¹

It becomes apparent that some of the many early reports by non-botanists of Rhododendron colonies in New Hampshire may be accurate, the occurrence in Hopkinton being a case in point. In 1874, C. S. Hitchcock stated that *Rhododendron maximum* grew in that township. On page 543 of volume I of his "Geology of New Hampshire" he made

¹Published with the approval of the Director of the New Hampshire Agricultural Experiment Station as Scientific Contribution No. 249.

the following comment as part of a general discussion of the few and scattered colonies of the species in the State, “— I have got traces of it in Hopkinton and Hooksett.” It is certain from Hitchcock’s other comments that he knew the plant well. But it is by no means clear that he had more than verbal assurance that it grew wild in these two townships; nor does he state who his informants were. We have been inclined to rule out of consideration all such reports because in our own experience we have found that most of the general public in Maine and New Hampshire do not know *R. maximum*. In this instance however, the report of a station in Hopkinton proves to be authentic.

Early in March 1959, Mr. Henry Mock, a senior at the University of New Hampshire and a resident of Contoocook brought us a specimen from a small wild colony which he stated grew on the farm of a Mr. Frank Kimball in Hopkinton. On June 2 we were shown the colony by Mr. Mock and Mr. Kimball. The stand is particularly vigorous and luxuriant with rather uniform stems some of the tallest of which were 12 or more feet high. There were few flowerbuds for the current season and there were no seedlings nor small plants in the area, in this respect differing markedly from most of the other stands in both Maine and New Hampshire where seedlings and young plants are often numerous. The colony is rectangular in shape and is about 50 feet wide by 150 feet long. The regular shape of the colony, the uniform growth and the absence of young plants made it seem planted rather than wild. However, Mr. Kimball convinced us that the colony was quite natural. He recalled his father Herbert Kimball, who was born about 1862, stating that in his youth, the colony was vigorous, but that somewhat later (about 65 years ago according to Frank Kimball), the bigger protecting trees were cut off for lumber, after which the Rhododendrons declined seriously. In recent years with the growth of suitable species of shading and protecting trees in the vicinity of the stand it has made a remarkable recovery.

The Harrisville Rhododendrons to our knowledge have not been reported previously. Mr. Tudor Richards of Dublin

first learned of this colony from local residents a few months ago and made arrangement with Mr. Merle Jones of Hancock who guided Mr. Richards and the senior author to the station on June 9, 1960. This part of Harrisville and adjacent Hancock is heavily wooded with considerable swamp-land and intervening rocky upland. The colony is very close to the Hancock line and is about three quarters of a mile east of Skatutakee Lake.

Rhododendron plants are found over a total area of about one half acre. A dense growth of middle-sized to large shrubs occupies the wetter places while an equal quarter acre of drier footing on the eastern side has some isolated large plants as well as some scattered small individuals which must have started as seedlings in recent years. While a few plants are close to 10 feet in height, most of them fall short of this. It is evident that the plants comprising this colony have not yet attained their full growth: at least in other colonies that we have studied the biggest plants have nearly always been considerably taller than those in Harrisville. Here the older plants of earlier times presumably have been replaced by seedlings or rejuvenated sprout growth. This is a colony that undoubtedly will be improving during the next few years.

This makes a total of 11 townships in which we have observed wild stands of Rhododendron in New Hampshire. These are Albany, Pittsfield, Barnstead, Hopkinton, Grantham, Manchester, Mason, Wilton, Fitzwilliam, Harrisville and Richmond. Are there still other stations in New Hampshire? In "The History of Weare" by William Little published in 1888 there is mention of the occurrence of both Mountain laurel and Rhododendron in the township. Leander W. Cogswell in 1880 in his "History of the Town of Henniker" states that "rhododendron or river laurel adorns banks of Contoocook" which might refer to *Kalmia latifolia*. We have been told of a colony near the eastern end of Squam Lake probably in Sandwich. Thus there may be other stations but it seems to us that we have now a fairly complete list of Rhododendron colonies in New Hampshire. Several years of diligent sleuthing on our part have resulted in dis-

closing only one New Hampshire station (Harrisville) that had not been reported in some published work. And this stand was well enough known locally to be a topic of conversation at a party. — DEPARTMENT OF BOTANY AND DEPARTMENT OF HORTICULTURE, UNIVERSITY OF NEW HAMPSHIRE, DURHAM, NEW HAMPSHIRE.

CAMPANULAR PERSISTENCE. — While walking on the railroad in Randolph, N. H., near the former station of Appalachia, in the summer of 1920, I observed, on a gravelly embankment, one good-sized clump, about six inches in diameter and the same in height, of a many-stemmed *Campanula*, with small pale blue flowers on naked flexuous peduncles. Leaving most of the plant undisturbed, I placed a portion in the herbarium of the New England Botanical Club (*Pease 18093*), and by analysis and comparison with specimens in the Gray Herbarium identified the plant as *Campanula divaricata* Michx., which is now described in the eighth edition of Gray's *Manual* as growing "in dry woods and rocky slopes, w. Md., W. Va. and Ky., s. to. Ga. and Ala." In my *Vascular Flora of Coös County, N. H.* (1924), p. 345, I have reported the plant as rarely adventive and persistent in 1923.

Over the years from 1923 to the present I have watched the fate of this little pilgrim, and several years ago, when the railroad track was heavily reballasted with unpromising gravel, found its site deeply buried. For several years I considered it as gone beyond recovery, but then it rose again from the gravel, and my annual visits recommenced. Then came another calamity; some four or five years ago the track was again reballasted, this time with even more unpromising cinders, and I had again to mourn the loss of the *Campanula*. This summer (1960) it occurred to me to look again, and lo! there again it was at its accustomed place, rising through cinders as it had previously through gravel.

Forty years, then, at least — for I do not know how long before 1920 it was first established here — this delicate little plant has survived an austere diet and violent attacks upon its security. It shows no disposition to increase, but whether